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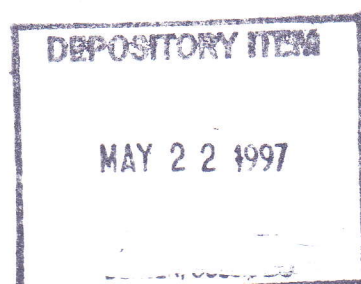
ENVIRONMENTAL DIPLOMACY

THE ENVIRONMENT AND U.S. FOREIGN POLICY



U.S. DEPT. OF STATE

UNITED STATES DEPARTMENT OF STATE



0556-C



LETTER FROM VICE PRESIDENT *Albert Gore, Jr.*

The U.S. State Department's first annual report on the environment and foreign policy represents a new way of looking at the world.

We have moved beyond Cold War definitions of the United States' strategic interests. Our foreign policy must now address a broad range of threats—including damage to the world's environment—that transcend countries and continents and require international cooperation to solve.

Environmental problems such as global climate change, ozone depletion, ocean and air pollution, and resource degradation—compounded by an expanding world population—respect no border and threaten the health, prosperity, and jobs of all Americans. All the missiles and artillery in our arsenal will not be able to protect our people from rising sea levels, poisoned air, or foods laced with pesticides. Our efforts to promote democracy, free trade, and stability in the world will fall short unless people have a livable environment.

We have an enormous stake in the management of the world's resources. Demand for

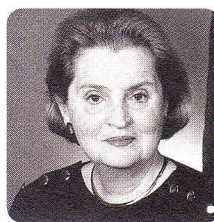
timber in Japan mean trees fall in the United States. Greenhouse gas emissions anywhere in the world threaten coastal communities in Florida. A nuclear accident in Ukraine kills for generations. Over-fishing the world's oceans depletes resources for future generations. Our children's future is inextricably linked to our ability to manage the earth's air, water, and wildlife today.

This first State Department report details the Clinton Administration's priorities for working globally, regionally, and bilaterally to combat serious and growing international environmental threats. It documents an important turning point in U.S. foreign policy—a change the President and I strongly support.

Sincerely,

A handwritten signature in dark ink, appearing to read "Al Gore". The signature is stylized and fluid.

AL GORE

LETTER FROM SECRETARY OF STATE *Madeleine K. Albright*

Just over one year ago, then-Secretary of State Christopher announced that the State Department would spearhead a government-wide effort to meet the world's environmental challenges.

He said, "The United States is providing the leadership to promote global peace and prosperity. We must also lead in safeguarding the global environment upon which that prosperity and peace ultimately depend."

This report is an outgrowth of that initiative. It will be released every year on Earth Day. Its purpose is to update global environmental challenges and policy developments and to set our priorities for the coming year.

Not so long ago, many believed that the pursuit of clean air, clean water, and healthy forests was a worthy goal, but not part of our national security. Today environmental issues are part of the mainstream of American foreign policy.

We are building on three basic premises.

First, we know that damage to the global environment, whether it is overfishing of the oceans, the build-up of greenhouse gases in the atmosphere, the release of chemical pollutants, or the destruction of tropical forests, threatens the health of the American people and the future of our economy. We know that rapid population growth exacerbates these problems and has consequences that transcend national borders. And we know that the global environment can be protected most effectively if nations act together. For these reasons, this effort must be a central concern of American foreign policy.

Second, environmental problems are often at the heart of the political and economic challenges we face around the world. In Russia and central Europe, environmental disasters left over from the Soviet era shorten lives and impede reform. In central Africa, rapid population growth combined with the competition for scarce resources fuels conflict and misery. We would not be doing our jobs as peacemakers and as democracy-builders, if we were not also good stewards of the global environment.

Third, we believe, as did President Kennedy, that "problems created by man can be solved by man." The environmental problems we face are not the result of natural forces or the hidden hand of chaos; they are caused

by human beings. These problems can be solved if America works in partnership with governments, NGOs, and businesses that share our commitment to a cleaner and healthier world.

To meet this challenge, the State Department is changing the way we do business. Four years ago, we appointed an Under Secretary for Global Affairs. Our embassies and bureaus are developing regional environmental policies that advance our larger national interests. To help coordinate these policies, we are opening regional environmental hubs at our embassies in Costa Rica, Uzbekistan, Ethiopia, Nepal, Jordan, and Thailand. We have made environmental cooperation an important part of our relationships with countries like Japan, India, Brazil, and China.

Globally, we are pursuing five environmental priorities: the problems of climate change, toxic chemicals, species extinction, deforestation, and marine degradation. We have made many important advances, including agreements to phase out the remaining substances that damage the stratospheric ozone layer and to ban ocean dumping of low-level radioactive waste.

We have many opportunities this year to make further progress. At the conference on the UN Framework Convention on Climate Change, which will be held in Kyoto, Japan this December, we will be pressing for a substantive agreement to reduce greenhouse gas emissions. The United Nations will hold a special session this year to commemorate the fifth anniversary of the Rio Earth Summit.

There will also be an important meeting of the Convention on the International Trade in Endangered Species.

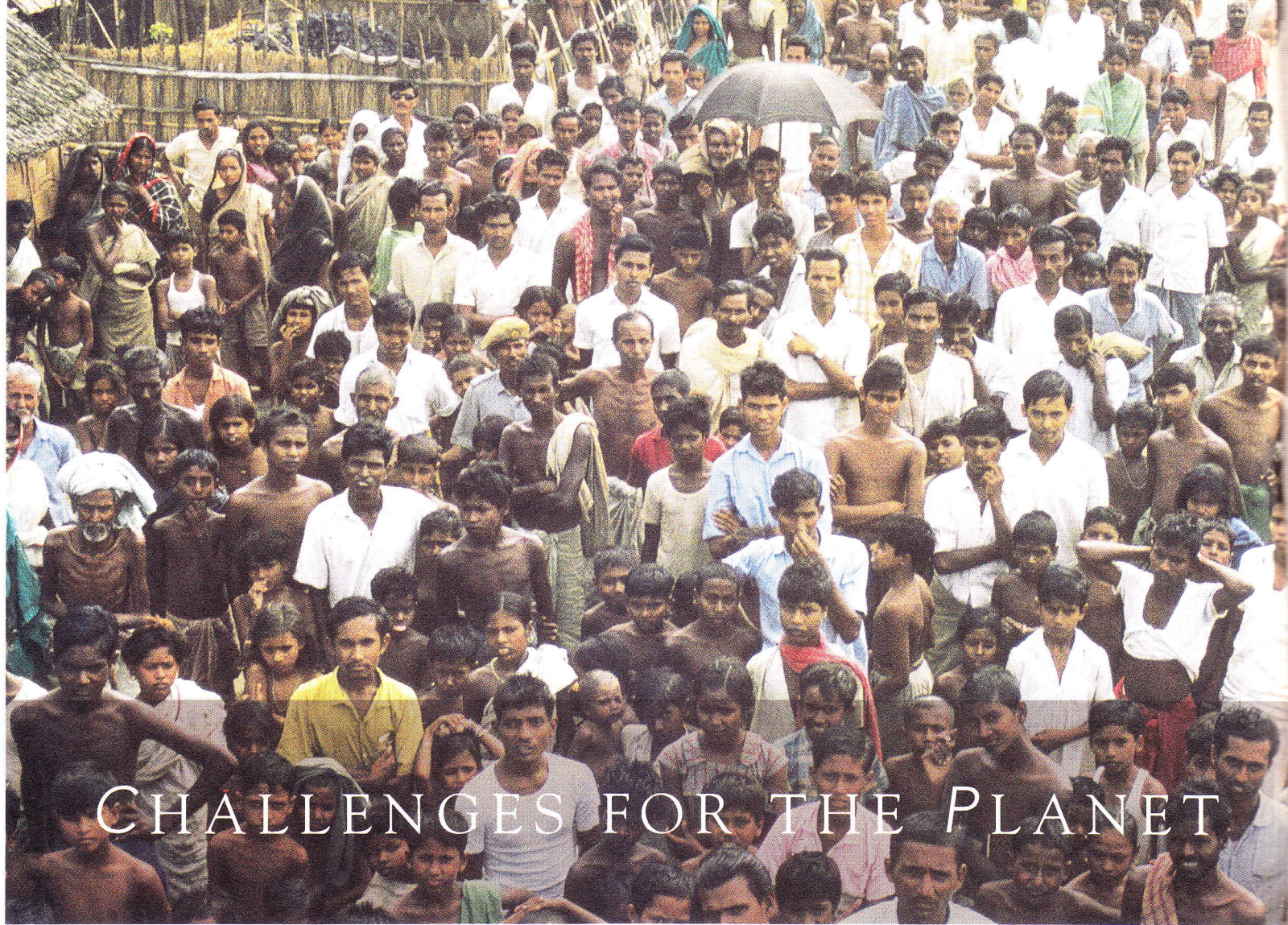
Environmental diplomacy is a work in progress.

The depletion of our fisheries, the increase in the level of greenhouse gases, and the destruction of habitats and species did not occur overnight and cannot be reversed overnight. We must work with the Congress and the American people to obtain the resources we need to support our diplomacy in this area, as in all others.

We have made a good beginning. Our nation and our friends and partners around the world have the tools, the commitment, and the know-how to get the job done. As Secretary of State, I am committed to this effort and optimistic that we will succeed.



MADELEINE K. ALBRIGHT



CHALLENGES FOR THE PLANET

Between 1946 and 1996, dramatic political change, economic progress, and technological breakthroughs combined to reshape the world.

Today, more people are living under democracy than at any time in history, free-market economies are expanding on every continent, and innovations like the Internet have made our communications immediate and international. But just as common bonds link the

world closer together, so too do common threats increasingly endanger continued prosperity here at home and around the world.

Climate change, deforestation, overfishing, and other environmental concerns transcend political divisions and geographic boundaries and present a major challenge for the next century. They are the consequences of the enormous pressures placed on the world's resources by an ever-increasing population, spreading industrialization, land conversion, urbanization, and rising consumption.

At the end of World War II, the earth's population stood at two billion; now it is nearing six billion. It took hundreds of thousands of years to reach the two billion mark; only 50 years to triple it. This gargantuan rise in pop-



ulation has crowded the cities, overtaken green spaces, and created unprecedented demand for energy, food, and shelter.

Forests four times larger than Switzerland are lost every year.

Seventy percent of the world's marine fish stocks are fully to over-exploited. The people of the world annually release 23 billion tons of carbon dioxide into the air, increasing the earth's temperature and threatening the health and habitat of animals, plants, and people. Estimates are that we lose 70 species a day, forever. And the rate of destruction and loss is accelerating.

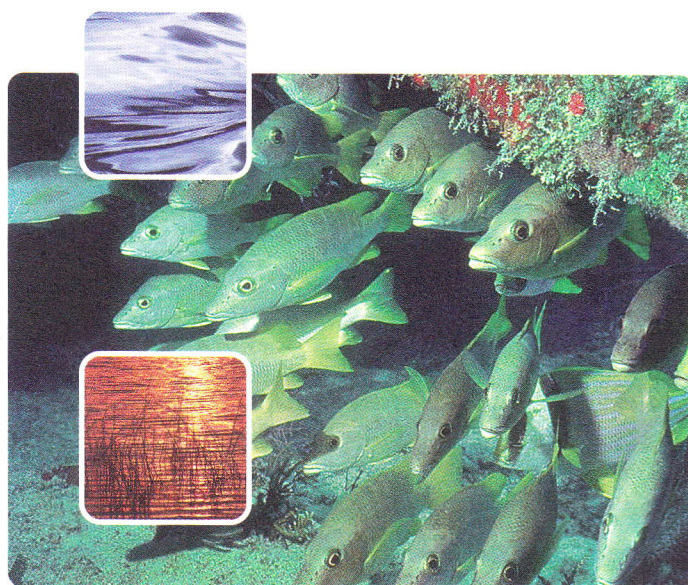
No one country is responsible for these problems. Many nations have contributed to their causes, and they can be addressed effectively only if the nations of the world work together, adopting and implementing policies that are result-oriented.

It will take more than governments to combat environmental threats. Global institutions, including a World Bank which factors environmental implications into its lending decisions, private businesses and industries, and nongovernmental organizations must all be involved in the search for and implementation of solutions. Additionally, we must reform key United Nations structures to help organize and coordinate international actions. Only by working in tandem can we

balance world economic growth and development with the protection of our planet and the life it sustains.

By working within existing and evolving international structures, negotiating important treaties and agreements, and building on established relations to break new ground, the State Department is addressing environmental issues which directly affect the health, safety, and economic prosperity of the American people. Whether protecting fish stocks or the sources of many of our medicines, reducing the amount of pesticides and toxins in our air and water, or mitigating the consequences of climate change, the State Department is negotiating agreements that will defend America's interests by safeguarding the global environment.

The State Department, working with other agencies, is focusing its energies and efforts on five pressing global environmental issues that can only be tackled collectively, by all the nations of the world: climate change, toxic chemicals and pesticides, biological diversity, forest loss, and ocean degradation.





"IT HAS BEEN MY OPINION, THAT HE WHO RECEIVES AN ESTATE FROM HIS ANCESTORS IS UNDER SOME KIND OF OBLIGATION TO TRANSMIT THE SAME TO THEIR POSTERITY."

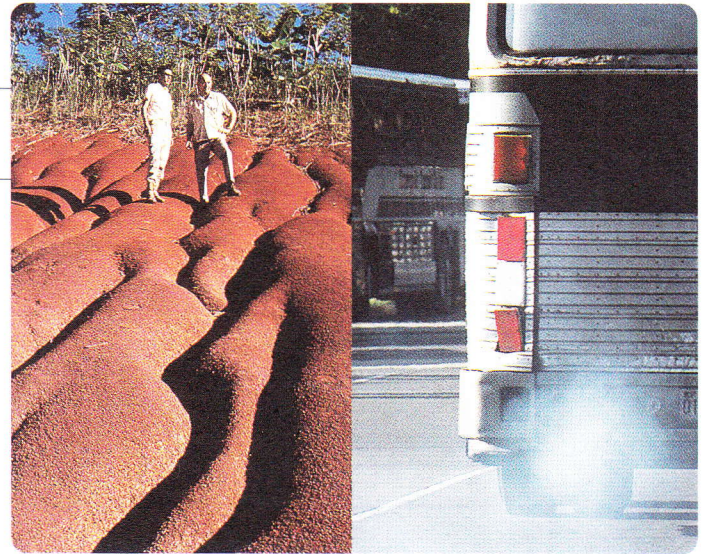
— Benjamin Franklin

CLIMATE CHANGE

Global warming is a serious and growing threat, and most governments, including the United States, agree more must be done to protect life and economies from its effects.

There is now broad consensus within the international scientific community that human activity is altering the Earth's climate system. The burning of coal, oil, and other fossil fuels is increasing substantially the concentration of heat-trapping gases such as carbon dioxide, methane, and nitrous oxide in our air. The earth's temperature and sea levels are rising as a result.

Right now, 23 billion tons of carbon dioxide are being released into the world's atmosphere each year. At this rate of fossil fuel consumption, the Intergovernmental Panel on Climate Change (IPCC), an international body made up of 2,000 of the world's best



climate scientists, predicts the planet's temperature will rise by 1.8 - 6.3 degrees Fahrenheit, and the seas will rise between 6 inches and 3 feet by 2100.

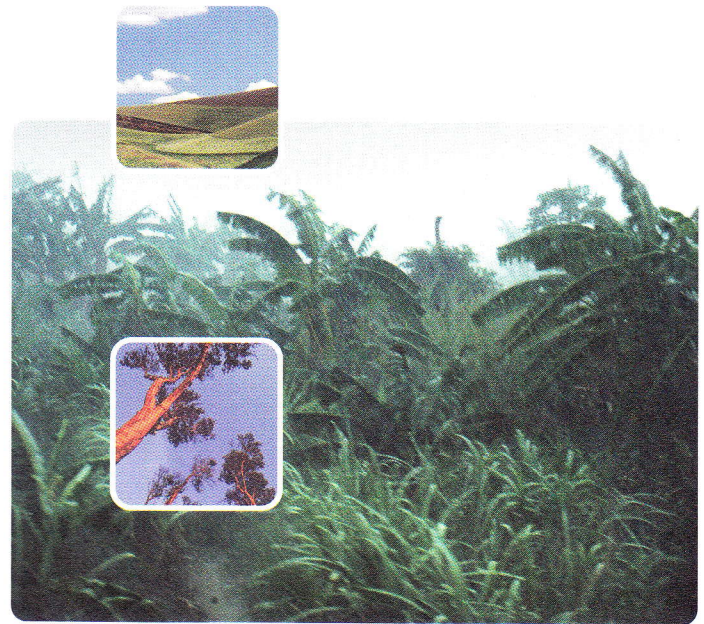
This amount of climate change will affect us all. The range of impacts is likely to include: threats to human health, including increases in heat-related deaths and illnesses and in the incidence of infectious diseases; mounting damage to coastal homes, businesses, and habitat from rising sea levels; accelerated loss of animal and plant species; and a shift in agriculture and food production as temperature and precipitation patterns change. Many scientists also predict that climate change will lead to an increase in the frequency and intensity of floods, storms, and droughts.

As the world's largest economy and emitter of greenhouse gases, the United States has a special responsibility to take meaningful action to attack the causes of climate change and miti-

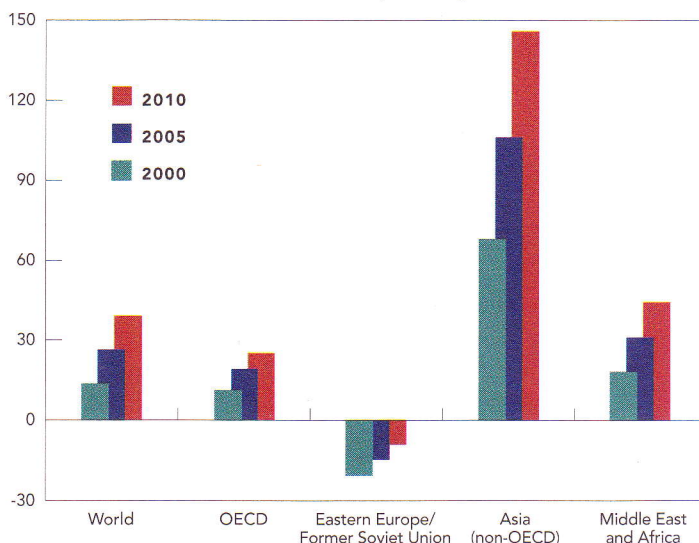
gate its effects. Acting alone, however, will not solve the problem. Over three-quarters of global emissions come from outside the United States, and as developing countries such as China and India continue to grow economically, their emissions will become an increasingly large portion of the problem.

It will take time to change the global trend of emissions growth. The United States is committed to strong action, recognizing that we must adopt solutions that protect the environment but that are also consistent with our continued economic growth and competitiveness.

The State Department is engaged in a massive diplomatic effort with more than 160 nations to reach an agreement on future emissions reductions at the Third Conference of the Parties to the UN Framework Convention on Climate Change in Kyoto, Japan this December. The United States is pushing for



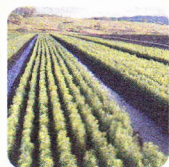
TOTAL PROJECTED CARBON EMISSIONS, SELECTED COUNTRIES AND REGIONS (percentage increase from 1990)



This graph shows the projected growth in carbon emissions in the absence of an international agreement to reduce or limit emissions. Source: DRI/McGraw Hill and International Energy Outlook of the U.S. Energy Information Administration.

an agreement that includes legally binding emissions targets for developed nations, maximum national flexibility in reaching those targets, and provisions that would substantially involve developing countries in any overall solutions to the problem.

The State Department, with other U.S. government agencies, is also working with key countries around the world to develop innovative ways of combating climate change by improving energy efficiency, protecting forests and other carbon "sinks" (which absorb carbon from the atmosphere), and promoting the use of renewable technologies. For example, through our Common Agenda with Japan, both governments are cooperating on climate change research based on a multi-year, multi-billion dollar contribution from Japan.



"IF WE ARE GOING TO LIVE SO INTIMATELY WITH THESE CHEMICALS—EATING AND DRINKING THEM, TAKING THEM INTO THE VERY MARROW OF OUR BONES—WE HAD BETTER KNOW SOMETHING ABOUT THEIR NATURE AND THEIR POWER."

— Rachel Carson

TOXIC CHEMICALS AND PESTICIDES

The security of our water and air and the safety of our food are directly affected by the world's ability to balance the agricultural, medicinal and industrial benefits of pesticide and chemical use with their risks.

Thirty-five years ago, Rachel Carson in her seminal book, *Silent Spring*, first raised the alarm in America about the dangers of unchecked use of persistent organochlorine pesticides like DDT and chlordane. The United States subsequently took substantial steps to ensure that these and other pesticides do not poison our people or wildlife. Yet, as we approach the twenty-first century, the effects of certain organochlorine chemicals can still be felt worldwide.

This group of compounds, also known as persistent organic pollutants (POPs) are capable of traveling thousands of miles from their source, often moving in a northerly direction. POPs can last for decades in the envi-

ronment, where they accumulate in the fatty tissue of animals and people. These substances include such notorious compounds as PCBs and DDT, which—though no longer produced in the United States—are still used abroad and continue to turn up in seal tissue in the Alaskan Arctic, in Great Lakes fish, and in the bloodstream of seabirds off the California coast. Humans in such remote locations as Canada's far northern Baffin Islands carry traces of these chemicals in their bodies.

While the United States has been able to address many of the risks from these and other substances at the national level, some





of these risks can be mitigated only through global action. Many developing countries do not have the resources or expertise to provide effective regulatory oversight of hazardous chemical use. The United States has an interest in helping to ensure that countries that produce or import these chemicals use them safely.

Addressing these problems effectively requires cooperation with other countries. The State Department and other U.S. agencies are working globally, regionally, and bilaterally to reduce and manage the use of these toxic substances.

The United States and over a hundred other countries recently agreed to begin negotiating a global agreement to ban the production



or minimize the release of 12 of the most hazardous persistent organic pollutants on the planet.

The United States is also participating in the negotiation of a global agreement that would require governments to provide each other with better information about especially hazardous chemicals and pesticides prior to the export of these substances.

Through NAFTA's Commission on Environmental Cooperation, the United States, Canada, and Mexico are working together to advance the phase-out of specific persistent organic pollutants, including PCBs and chlordane, in North America.

The United States and Canada are cooperating to rid the Great Lakes of persistent organic pollutants.



"MOST SCIENTISTS WHO WORK IN SPECIES DIVERSITY AGREE WE'RE AT THE BEGINNING OF A SPECIES EXTINCTION SPASM OF A MAGNITUDE THAT HASN'T BEEN SEEN SINCE THE END OF THE DINOSAURS."

— E.O. Wilson

BIOLOGICAL DIVERSITY

Scientists warn that a quarter of all species could be gone in fifty years. At present extinction rates, they estimate seventy different kinds of animal and plant life disappear every day, forever.

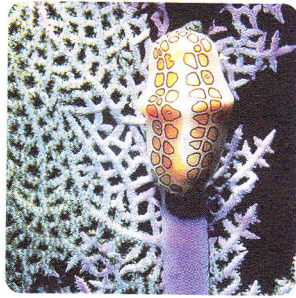
Rising consumption of animal and plant products, the rapid conversion of land to human uses, increased pollution, and the spread of exotic species to non-native habitats are putting enormous stress on the world's flora and fauna.

The acceleration of this loss of life is occurring just as we are beginning to understand the value of maintaining biological diversity. Compounds and by-products derived from animals and plants from around the world contribute to the development of new medicines, pharmaceuticals, agricultural products,



and food ingredients. Scientists recently developed a treatment for childhood leukemia from a flower, the rosy periwinkle, found only in Madagascar, and a treatment for breast cancer from the yew tree of the Pacific Northwest.

There is no way to estimate the potential benefits that may come from millions of species yet to be studied or yet to be discov-



ered. And there is no way to estimate the health, economic, and spiritual costs to our children who could inherit a world robbed of a drug to cure AIDS, stripped of a strain of disease-free wheat, or bereft of the wonder of such diverse creatures as tigers and sea turtles.

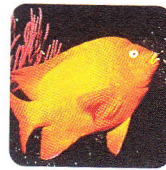
The State Department, along with other agencies, is working to protect biological diversity, particularly through negotiations, agreements, and initiatives to conserve forests, wetlands, and coral reefs—ecosystems all rich in biological diversity and critical for sustaining human life.

Through the International Coral Reef Initiative, the United States has entered into a partnership with 75 other countries, scientists, and environmental groups to better protect, manage, and monitor coral reefs and the life they support.

The United States actively supports the Ramsar Convention, an international agreement to encourage local and national efforts to preserve and prudently manage wetlands of global significance.

Through the Convention on the International Trade in Endangered Species, we are attempting to curb international trade in rare plants and animals.

The State Department is also working to promote American interests through the Convention on Biological Diversity. The United States has signed, but not ratified the Convention and is currently not a full partner in the negotiations.





"THE LEAVES OF THE TREE ARE FOR THE HEALING OF THE NATIONS."

— Revelation 22:2

FORESTS

*The world's forests are disappearing
at an unprecedented rate.*

Every year, forests four times the size of Switzerland are lost because of clearing and degradation. In the 1980s, an average of 38 million acres of tropical forest were destroyed each year; those trends have shown no signs of decreasing in this decade. Subsistence farming, unsustainable logging, unsound development of large-scale industrial projects, and national policies that distort markets and subsidize forest conversion to other uses are causing deforestation worldwide, from Cambodia to Colombia, from Cameroon to Western Canada and the Western United States.



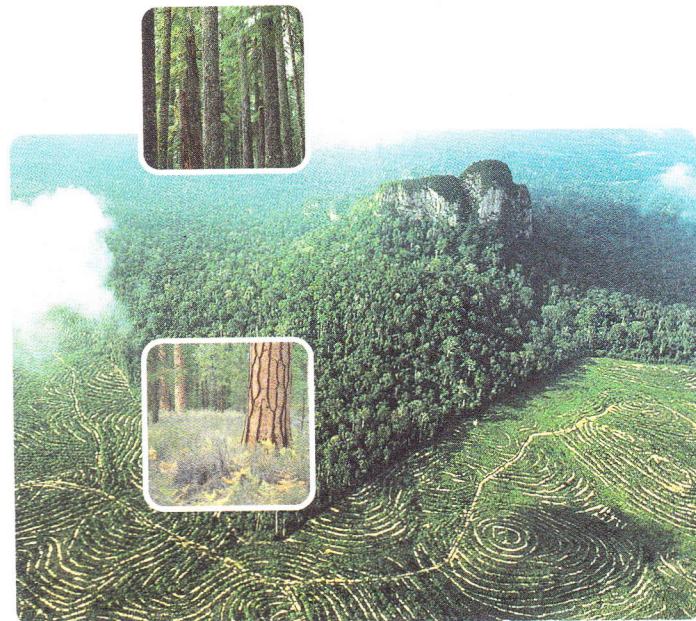
The loss of forests has major implications for the world. Forests are home to 70 percent of all land-living animals and plants. They replenish the earth's atmosphere and provide the planet with fresh air by storing carbon and producing oxygen. They help filter pollution out of the water and protect against flooding, mudslides, and erosion. Forests provide timber, medicines, food, and jobs.

The United States has an enormous stake in the sustainable management of the world's forests. We are a major forest products importer and exporter. Our growing pharmaceutical and food processing industries have a vested interest in protecting the source materials for new medicines, pharmaceuticals, and food additives. Forests and their

ability to absorb carbon dioxide lower the rate of global climate change.

President Clinton has committed to the goal of achieving sustainable management of our forests by the year 2000. And the State Department and other agencies have been working closely with our global partners to slow deforestation around the world.

Through the United Nations Commission on Sustainable Development, we are pushing for greater national accountability in forest conservation efforts, helping to build the capacity of less developed countries to manage their forests sustainably, and encouraging the private sector to develop codes of conduct to promote sustainable forest management.



Through the UN system, the United States is advocating and assisting in establishing a process for monitoring global forest conditions.

Through the Convention on Biological Diversity, we will be working to establish national networks of protected forest areas.

The United States has been supporting efforts to preserve forests in Russia, South America, Africa, and in the Asia-Pacific region. For example, the State Department has helped Suriname develop the capacity to consider the environmental, economic, and social consequences of timber production in its pristine forests; in Papua New Guinea, the Department is supporting a project to create small, village-based enterprises as alternatives to industrial-scale forest exploitation.



"LIFE ORIGINATED IN THE SEA, AND ABOUT EIGHTY PERCENT
OF IT IS STILL THERE."

— Isaac Asimov

OCEANS

*The oceans, ravaged by pollution and
overfishing, are in trouble.*

World fisheries are under unprecedented stress as competition for these finite resources increases. Pollution caused by the deliberate dumping of debris, chemical contaminants, agricultural and industrial runoffs, sewage, and vessel discharge has endangered marine

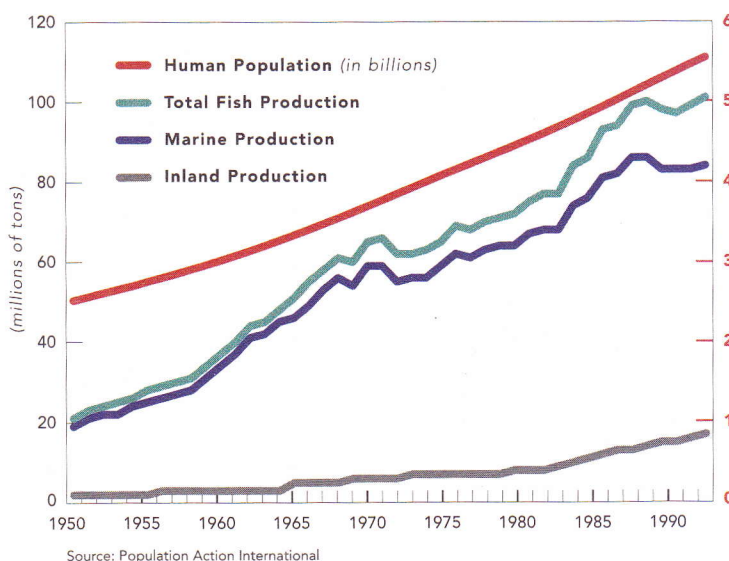
life and habitats. Coral mining, blast fishing, the dumping of contaminated dredge material, and other human activities have destroyed or dramatically damaged ocean and coastal habitats and the wildlife they sustain.

The Food and Agriculture Organization of the United Nations estimates that 70 percent of the world's commercially important fish stocks are fully or over-exploited.

Chronic overfishing has depleted Atlantic cod and halibut stocks and resulted in the loss of thousands of American jobs. Stocks of some large ocean fish—tunas, sharks, swordfish, and marlin—have declined 60–90 percent in the last two decades. Every year, 27 million tons of fish, marine mammals, sharks, sea turtles, and seabirds, one third of the world's catch, are caught unintentionally and thrown back dead or dying into the ocean.

The United States, with one of the longest coastlines in the world and as a major maritime power and seafood consumer, has vested economic and environmental interests in protecting the oceans. In addition to providing a major food source, the oceans are maritime highways for efficient commerce and national security. They also serve as a source for oil, for

INCREASING HUMAN POPULATION AND
GLOBAL FISH PRODUCTION, 1950-1993





medicine, and for recreation. The health and economic well-being of the world's coastal populations and communities are intimately linked to the quality of the marine environment.

Balancing the health and productivity of the oceans with the needs and demands of growing human populations is one of the great challenges facing the world. Globally, regionally, and bilaterally, the State Department is working to clean up and protect the oceans and their resources.

The United States was a leading champion of and one of the first nations to ratify a landmark 1995 United Nations Treaty designed to improve the management of shared fish stocks. This treaty combines a precautionary approach to fisheries management with strong provisions on enforcement and incentives for cooperation among countries.

The United States is also working to strengthen regional fisheries conservation and management bodies and to create such bodies where none exist. For example, in the International Commission for the Conservation of Atlantic Tunas, the United States has successfully negotiated measures to greatly improve the conservation of Atlantic bluefin tuna and North Atlantic swordfish.

The State Department led the fight for adoption of a Global Program of Action to combat the increasing threat from land based sources of marine pollution. Nations are working together, pursuant to this 1995 Program, to combat ocean contamination from sources such as sewage and wastewater, persistent organic pollutants, nutrients, heavy metals, oils, and sediments.

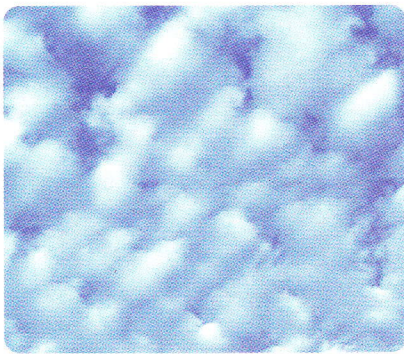
The United States organized and is working through the global London Dumping Convention to reduce ocean dumping of waste and contaminants and through the UN's International Maritime Organization to reduce vessel discharge.



ENVIRONMENTAL DIPLOMACY AT WORK

PROTECTING THE EARTH'S OZONE LAYER

The world can unite to solve challenging environmental problems. When it became clear that several man-made substances were severely damaging the Earth's ozone layer and that the result was likely to be millions of additional cases of skin cancer and cataracts worldwide, governments reacted. The 1987 Montreal Protocol and its subsequent amendments have dramatically reduced the emission of ozone-depleting substances

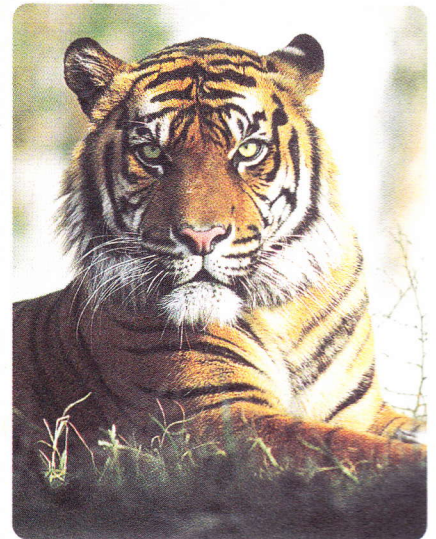


into the atmosphere. Because of this landmark agreement, scientists now believe that the ozone hole will begin to close sometime soon after the turn of the century. Technological innovation has spurred the development of ready substitutes for the worst ozone-depleting chemicals. The greatest remaining challenge is to continue to help developing countries make the transition to these alternatives.



TAKING ACTION TO PROTECT TIGERS AND RHINOS

Tigers and rhinos are species in trouble. The lucrative trade in their parts and products has pushed them to the brink of extinction in many places, despite the prohibition of this trade under the Convention on the International Trade in Endangered Species (CITES). In 1994, the United States placed sanctions on Taiwan under the Lacey Act for continuing to trade in rhino horn and tiger bone (products believed by some to have certain medicinal properties) and thereby undermining the effectiveness of CITES. In response to this action, Taiwan has taken dramatic steps to curtail all illegal wildlife trade, including trade in tiger bone and rhino horn. Taiwan has demonstrated an outstanding commitment to dealing with this serious problem. As a result, the United States has been able to lift the trade sanctions and now counts Taiwan as an ally in protecting the world's endangered wildlife.





REGIONAL CHALLENGES

*The environmental fates of nations
are inextricably and intimately linked
within a region.*

Toxins in the Great Lakes threaten the health of Canadians and Americans. Sulfur belched from coal-burning plants in China creates acid rain in South Korea, North Korea, and Japan. Water shortages add to the tension in the Middle East, where Syria's and Lebanon's control of Jordan River headwaters

directly affects water supplies downriver in Jordan, Israel, and the West Bank and Gaza.

In addition to these regional challenges, many countries also face internal environmental problems. In China, energy demand will triple by 2010. In Mexico City, 25 percent of the children have symptoms of asthma, and in some parts of the city, over half of the children under five suffer acute respiratory infections. In India, less than 10 percent of the nation's more than 3,000 cities and towns currently have adequate sewage collection and treatment facilities.

The ability of countries to tackle these types of problems has significant implications for their internal political and economic stability, for the political and economic stability of

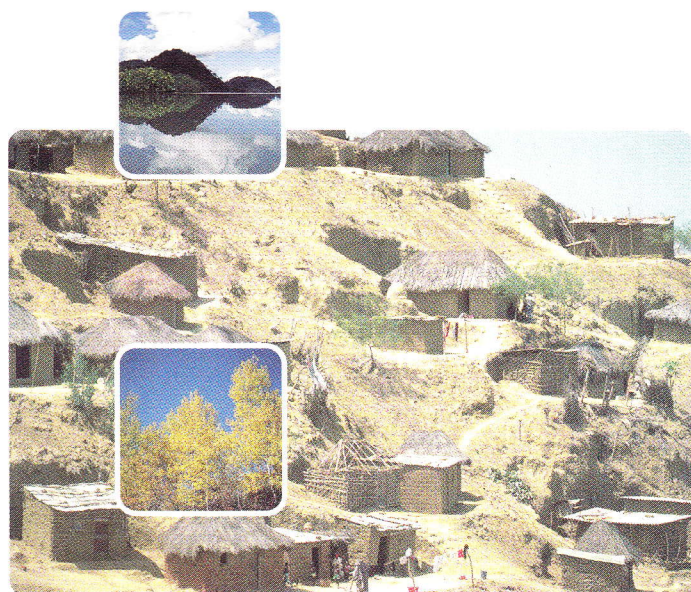
their region, and by extension, for U.S. foreign policy. Today, for more and more United States diplomats working in our embassies and consulates around the world, implementing American foreign policy means working on environmental issues.

The State Department now operates on the premise that countries sharing common resources share a common future and that neighboring nations are downstream and upwind, not just north and south or east and west, of each other. Threats to a shared forest, a common river, or a seamless coastline are forcing countries to expand their existing bilateral relationships to include environmental issues and to create new regional frameworks to confront and combat shared environmental challenges.

The State Department is integrating such regional and bilateral environmental issues into its diplomacy for three purposes:

To help stabilize a region where pollution or the scarcity of resources contributes to political tensions. For example, the struggle for water in the Middle East has a direct impact on regional security and stability. The objective of including environmental issues in the peace process is to turn a source of conflict into a force for peace. Cooperation on Jordan River water can complement, even spark, other joint actions within the region;

To enable the nations of one region to work cooperatively to develop initiatives to attack regional environmental problems. In 1996, 34 countries in the Western Hemisphere met in Santa Cruz, Bolivia at the hemisphere's first summit on sustainable development to develop initiatives on critical environmental issues such as urban pollution, water resources, and land use; and



To strengthen our relationship with allies by working together on internal environmental problems. The United States is working with Ukraine and the G-7 to improve reactor safety in order to prevent another nuclear disaster, and to close the Chornobyl nuclear power plant by the year 2000. By reducing the environmental risk, the State Department is helping to build strong ties and ensure a stable and secure relationship.

And the State Department is integrating environmental issues into its diplomacy in two new ways: by establishing regional environmental hubs in key embassies to work on transboundary solutions to regional environmental problems, and by raising the profile of environmental issues in many of our bilateral relationships.

The State Department will focus its regional and bilateral environmental diplomacy on five key environmental challenges that affect most, if not all, areas of the world: water resources, air quality, energy resources, land use, and urban and industrial growth.



"FOR THE LORD THY GOD BRINGETH THEE INTO A GOOD LAND,
A LAND OF BROOKS, OF WATER, OF FOUNTAINS AND DEPTHS
THAT SPRING OUT OF VALLEYS AND HILLS."

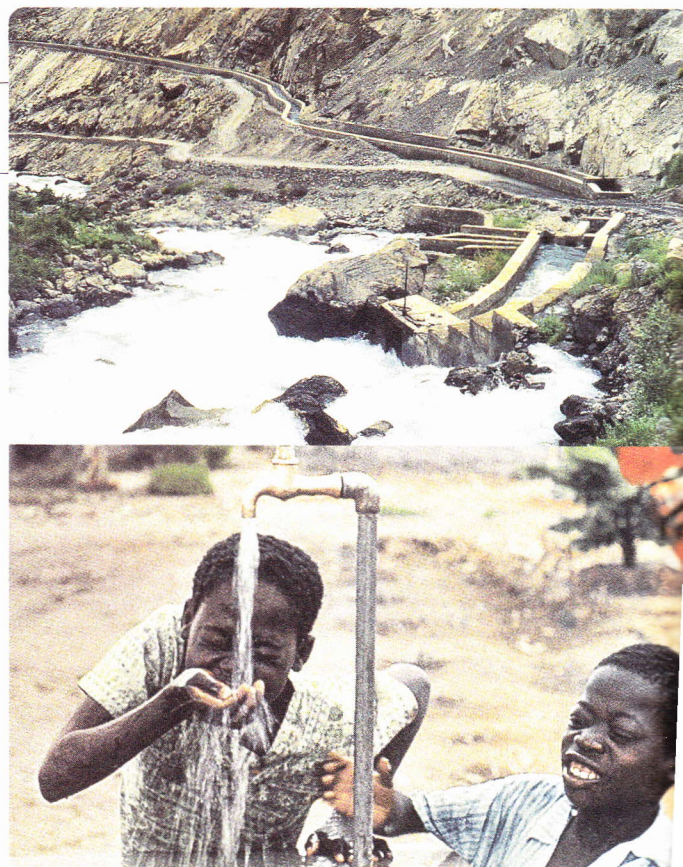
—Deuteronomy 8:7

WATER RESOURCES

*Water is the indispensable resource.
Whether used for drinking, irrigation,
transportation, or energy, people
must have it.*

But in increasing numbers of countries and regions around the world, the demand for fresh water outstrips the supply, and the quality of that supply is rapidly declining.

From 1950 to 1993, the amount of irrigated land increased from approximately 250 million acres to approximately 600 million acres. This increase has put enormous pressure on aquifers, rivers, and other water sources. Erosion, pesticide contamination, and other agricultural run-off are polluting water sources at an unprecedented rate and threatening human health, biodiversity, and



coastal resources. At the same time, population growth, particularly in the cities, has created major problems for water supply and treatment. Polluted water is a leading culprit in the increasing spread of a number of deadly diseases, including cholera.

Ensuring the availability of enough clean water for an increasingly thirsty planet is vital to American interests. The struggle for limited water resources has historically created tension among nations in key regions of the world, and the ability of individual

nations to provide drinkable water for their people directly affects their continued prosperity and stability.

The State Department is actively involved in helping countries and regions around the world counter threats to their fresh water resources.

In the arid Middle East, addressing and relieving chronic water shortages are major concerns for the nations there and pose a serious long-term challenge for the development of a lasting peace in the region. In Amman, Jordan, the government routinely closes the taps to conserve the limited amount of water available for its citizens. In Gaza, "fresh" water pumped from the aquifers does not meet world health standards for potable water. As part of the Middle East Peace Process, the United States chairs the Multilateral Working Group on Water



Resources and plays an active role in the Working Group on Environment and other fora. Through these structures, the United States is helping regional parties resolve critical issues related to water allocation, treatment, and supply.

In India, an estimated 70 percent of surface water is polluted. Less than 10 percent of the nation's more than 3,000 cities and towns currently have adequate sewage collection and treatment facilities. Delhi alone puts 630 million liters of untreated sewage into the Yamuna River every day. Waterborne diseases account for two-thirds of all illnesses in the country. Under the U.S.-India Common Agenda for the Environment, launched by the State Department in 1995, the U.S. Agency for International Development is contributing \$125 million in loan guarantees and providing technical assistance and training for the development and financing of commercially viable water supply, sewage, waste water treatment, and similar urban infrastructure projects in India.

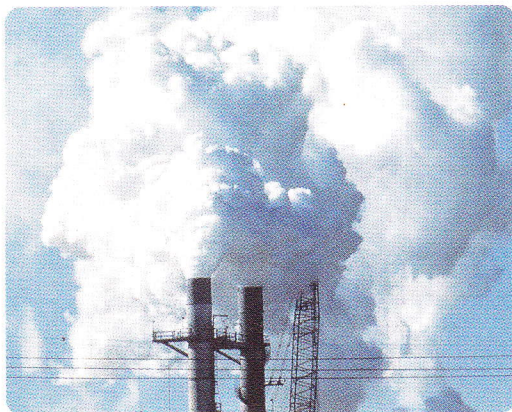


"CLEAR THE AIR! CLEAN THE SKY! WASH THE WIND!"

— T.S. Eliot

AIR QUALITY

For more than a billion people who live in urban areas around the world, the air they breathe is harmful to their health.



Over three-quarters of the world's 20 largest megacities regularly exceed the allowable limits for at least two harmful pollutants monitored by the World Health Organization. The effects can be serious. For example, sulfur dioxide affects human health and creates acid rain which can erode buildings, kill aquatic organisms, destroy croplands, and damage habitats. Nitrogen emissions in the presence of sunlight can create a form of oxygen toxic to humans and other living things. Excessive levels of lead can cause a host of health problems, even brain damage.

The rise in use of fossil fuels around the world—in cars, factories, and homes—has pumped millions of additional tons of these and other pollutants into the air. While countries are struggling to provide sufficient energy resources to power their economies, they must also set and enforce standards and regulations to protect air quality and human health.

The United States is offering technical expertise and promoting the export of clean technologies to help other nations improve their air quality and public health, support



American business, and promote the goals of sustainable development.

In Eastern Europe, decades of reliance on coal-fired power plants coupled with a lack of environmental regulation have severely degraded air quality. Air pollution has been implicated in a nearly 50 percent increase in lung cancer rates among longtime residents of Krakow, Poland and an approximately 25 percent increase in infant

mortality in parts of the Czech Republic. The United States was instrumental in establishing the Regional Environmental Center for Central and Eastern Europe, which has taken a leading role working with local and national governments, both directly and through the NGO community, to help develop strong environmental regulations on air quality and to encourage their enforcement.

In Mexico, air pollution is a serious problem. Twenty-five percent of the children in Mexico City have symptoms of asthma, and in parts of the city with very high levels of particulate pollution, over half the children under five suffer acute respiratory infections. Along the U.S.-Mexican border, air pollution on one side affects the quality of air on the other side. In 1995, the two governments established an air quality improvement district for El Paso, Texas, and Ciudad Juarez, Mexico, which is charged with developing a system of incentives and credits for new industry to reduce air pollution in the area.





"ENERGY WILL DO ANYTHING THAT CAN BE DONE IN THE WORLD."

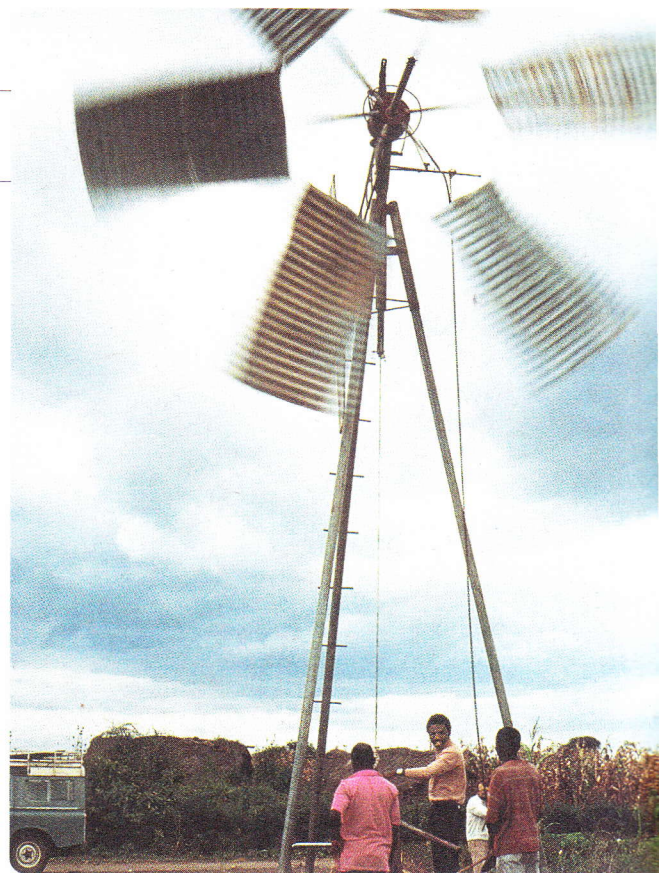
—J.W. von Goethe

ENERGY RESOURCES

Energy drives economies. It lights the cities, powers the cars, heats the homes, and runs the factories.

As countries around the world continue to develop, world consumption of energy could double by the year 2030.

The choice of which energy sources to develop are forcing governments and the private sector to face a series of complex and interrelated problems that affect societies at all levels. Coal, while abundant, easily convertible, and cheap, produces 1.3 times the carbon dioxide (a greenhouse gas that causes global warming) per unit of energy as oil, and 1.8 times that of natural gas. It also contains trace amounts of toxic chemicals, is usually high in acid rain-causing sulfur, and leaves a residue of soot and ash. Natural gas, a much more environmentally benign energy source, also brings with it attendant problems: leaks from natural gas pipelines add methane to the atmosphere, while liquid natural gas



poses potential hazards during its transportation. Nuclear power is a potentially limitless energy source and generates neither carbon dioxide nor other greenhouse gases, but there are environmental and safety risks associated with plant operation (Chernobyl and Three Mile Island) and with transport and storage of radioactive wastes.

Oil, the most versatile energy source, also raises environmental and political concerns. The concentration of reserves in relatively few countries makes it a politically volatile commodity. The highways of the world are congested with polluting automobiles run-



ning on gasoline, an oil derivative. Disasters related to the transport of oil in the world's fleet of supertankers remain etched in the public's mind; while the deliberate torching of Kuwaiti oil wells provides a vivid picture of waste and environmental degradation.

The power sources of the future may be wind, solar energy, and hydrogen fuel cells—but the technologies are not yet developed to allow for their cost-effective and widespread use.

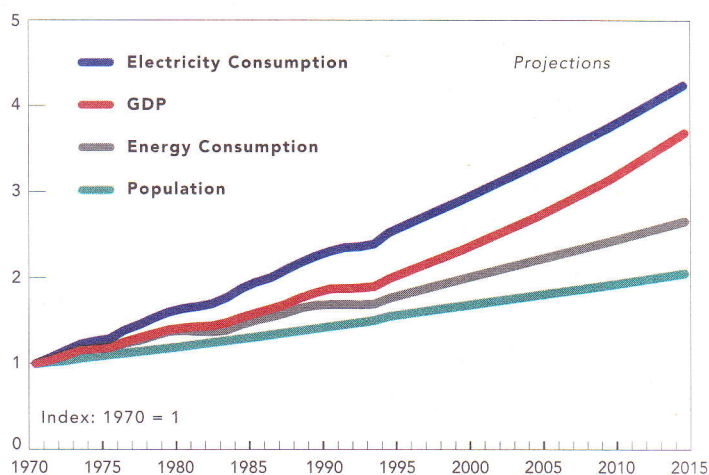
The United States, like other countries, is working on balancing the trade-offs in our energy choices. And we have a strong interest in helping other countries evaluate the best mixes of energy sources for their own needs, so that social, economic, environmental, and security factors are all considered.

China's demand for energy will triple by 2010. It could surpass the United States as the largest consumer of energy by 2020. China's reliance on coal for its energy needs results in high levels of sulfur emissions which cause acid rain in China and in other countries in the region. The United States is working with China through a bilateral forum launched by Vice President Gore and Premier Li Peng. Through this forum, which will address a wide range of environmental issues, the State Department and other U.S. agencies are working to address the social, economic, and environmental challenges posed by China's energy needs, and to find opportu-

nities to apply new U.S. technology in addressing these critical problems. Also, the U.S. is helping China inventory its emissions of greenhouse gases and upgrade its inefficient pulverized coal power to a more economic and environmentally sound system.

Though eleven years have passed since the explosion which destroyed Reactor #4 at the Chernobyl Nuclear Power Plant in Ukraine, its consequences persist. Genetic damage, increased cancer rates, and radioactive contamination of rivers, lakes, and water tables near Chernobyl are still widespread and remain difficult to predict. Together with the G-7, the United States is working to improve safety at Soviet-designed nuclear reactors in several countries and on a comprehensive program to close the remaining operational unit of the Chernobyl nuclear power plant by the year 2000. This program supports broad, deep reforms in Ukraine's energy sector, including increased efficiency, which also promotes Ukraine's economic stability.

WORLD ENERGY, GDP, AND POPULATION TRENDS, 1970-2015



Sources: **History:** 1970-1979: Energy Information Administration (EIA), Office of Energy Markets and End Use, International Statistics Database. 1980-1993: EIA, *International Energy Annual* 1993, DOE/EIA-0219(93) (Washington, DC, May 1995). **Projections:** EIA, *World Energy Projection System* (1996). **Gross Domestic Product (GDP):** The WEFA Group, *World Economic Service Historical Data* (Bala Cynwyd, PA, July 1993); and *World Economic Outlook*, Vol. 1 (Bala Cynwyd, PA, November 1995). **Population:** United Nations, *World Population Prospects: The 1994 Revision Annex Tables* (New York, NY, 1994), Tables A.1 and A.2.



"EACH BLADE OF GRASS HAS ITS SPOT ON EARTH WHENCE IT DRAWS ITS LIFE, ITS STRENGTH; AND SO IS MAN ROOTED TO THE LAND FROM WHICH HE DRAWS HIS FAITH TOGETHER WITH HIS LIFE."

—Joseph Conrad

LAND USE

By 2020, the world will need to feed 8 billion people.

New crop varieties, pesticides, and irrigation continue to improve yields around the world. However, technological advances have not been enough to offset the need for additional croplands. And as the search for and use of arable lands intensifies, the amount of erosion, siltation, deforestation, and desertification will increase.

Many governments around the world are faced with very difficult decisions about land use. Local and national leaders must weigh the competing goals of protecting a forest against providing additional croplands. They must consider whether regulations and protective measures to preserve a cropland's long-term viability, such as limiting irrigation and

restricting types of crops planted, place too much of an economic burden on their citizens by limiting crop yields in the short-term. They must evaluate whether to control certain types of land transactions—for example, selling arable land for commercial/urban use or to preserve it for agricultural production.

These decisions by governments have social, environmental, and economic implications, which in turn affect our foreign policy. To promote domestic and regional stability, the State Department is working bilaterally and regionally to help countries with land use issues.





In Central Asia, planners have diverted most of the fresh river waters that once flowed to the Aral Sea, to irrigate water-intensive cotton crops. Only 10 percent of that water now reaches the Aral. As a result, the Aral, once the fourth largest inland sea, has lost over half its surface area since 1960 and continues to shrink. The accompanying loss of the commercial fishing industry, deterioration in water quality, contamination of the soil from salt blown hundreds of miles from the former sea bottom, and declining ground water levels have devastated a 400,000 square kilometer region. This summer, the State Department will open a Regional Environmental Hub in Tashkent to promote regional cooperation on water management in the Aral Sea basin.

The hub will work with the U.S. Agency for International Development (USAID) which is already taking a two-pronged approach: in addition to installing water treatment and distribution systems and public health laboratory facilities in several countries, USAID is also working with governments in the region to develop sound water management practices and cross-border water sharing agreements.

As a continent, Africa suffers from the harsh effects of desertification—the spreading of the desert to once productive, arable lands. Dire economic conditions in parts of

Africa force people to extract as much as possible from the land now in order to survive. As a result, overgrazing, deforestation, inefficient technologies and management practices, and other factors have degraded over a billion acres of cropland, moderately or severely. Under the leadership of Vice President Gore and South African Deputy President Mbeki, the United States and South Africa are working together to combat the spread of deserts by improving capabilities to predict droughts, clearing invasive plant species that choke waterways, and providing training for better water management. The State Department will open a regional environmental hub in Addis Ababa this summer, and one of the hub's primary focuses will be developing regional efforts to combat desertification.



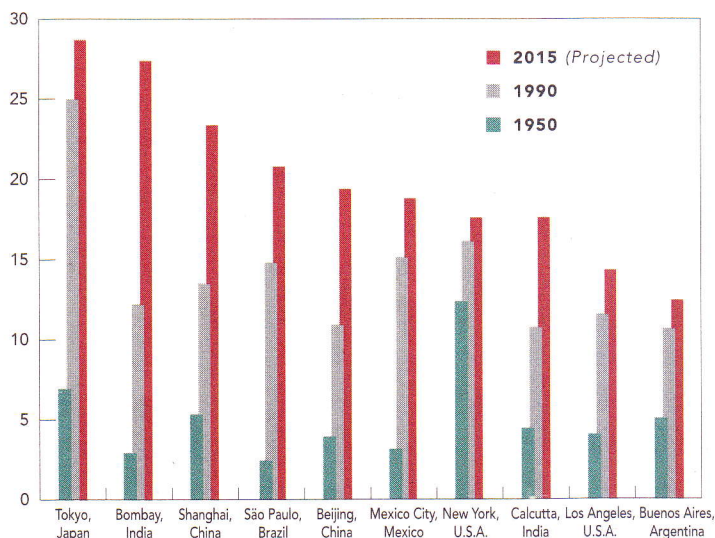
"WE CANNOT AFFORD MERELY TO SIT DOWN AND DEPLORE THE EVILS OF CITY LIFE AS INEVITABLE... WE MUST SET OURSELVES VIGOROUSLY ABOUT THE TASK OF IMPROVING THEM..."

—Theodore Roosevelt

URBAN AND INDUSTRIAL GROWTH

*By the year 2000, it is estimated that—
for the first time in history—half the
world's population will live in cities.*

WORLD URBANIZATION, 1994 REVISION (in millions)



Source: United Nations, 1995, *World Urbanization Prospects: The 1994 Revision*, New York: Population Division, Department for Economic and Social Information and Policy Analysis, United Nations.

In developing countries, cities account for 70 percent of Gross Domestic Product (GDP).

The rapid rate of urban and industrial growth has been a catalyst for tremendous economic dynamism in places like Asia and Latin America. But it also has serious environmental consequences. Most municipal and national governments lack the capacity to effectively treat sewage, dispose of solid waste, regulate air and noise pollution, or control sprawl. Most industries do not have pollution prevention technologies that can ensure clean production methods at affordable costs. As tens of millions of additional people are born in or migrate to urban and industrial areas, the magnitude of these problems multiplies exponentially.

Urban and industrial centers increasingly suffer from a proliferation of environmental health problems, including the re-emergence of many infectious diseases. As urban areas expand, arable land disappears as do wetlands and forests which filter water and air and provide flood protection. With many of the world's major cities located on or near the coast, pollution of the marine environment and the resulting damage to fisheries, coral reefs, and beaches is another major concern.

Engaging governments and the private sector in addressing the environmental effects of rapid urban and industrial growth is in America's interests: healthy and livable urban environments are key to long-term stability, social equity, and economic growth.

The State Department is using regional and bilateral structures to promote sustainable cities around the world.

By 2000, it is expected that Asia will have over half of the world's 20 most populous cities, with close to 150 million people living in them. The Asian Development Bank estimates that six Asian megacities already suffer from severe groundwater degradation. In three of these cities, sewage facilities exist for less than 15 percent of the population.



Through the Asia-Pacific Economic Cooperation forum (APEC), the State Department is promoting cooperative, integrated approaches to address the problems posed by urbanization and industrial expansion. APEC initiatives include efforts to: promote clean production technologies, phase out leaded gas and reduce harmful emissions, use innovative financing mechanisms to allow cities to invest in urban infrastructure such as waste water and solid waste collection and treatment, and reduce urban sources of marine pollution.

Cairo, already one of the world's most crowded cities, is adding a quarter of a million people every year. Urban and industrial pollution are major and growing problems there, as untreated waste water, soot, lead emissions, and other pollutants combine to pose a severe threat to human health. Levels of suspended particulates and lead are among the highest anywhere and cause an estimated 10,000-25,000 additional deaths each year. Under an initiative launched by Vice President Gore and Egyptian President Mubarak, the United States is working with Egypt to develop and implement sustainable solutions to Cairo's problems including: converting taxis and buses to natural gas, phasing-out leaded gasoline, moving smelters out of Cairo, and investing in modern, clean technology.



NEW TOOLS

The State Department has developed new diplomatic tools to integrate environmental issues into foreign policy.

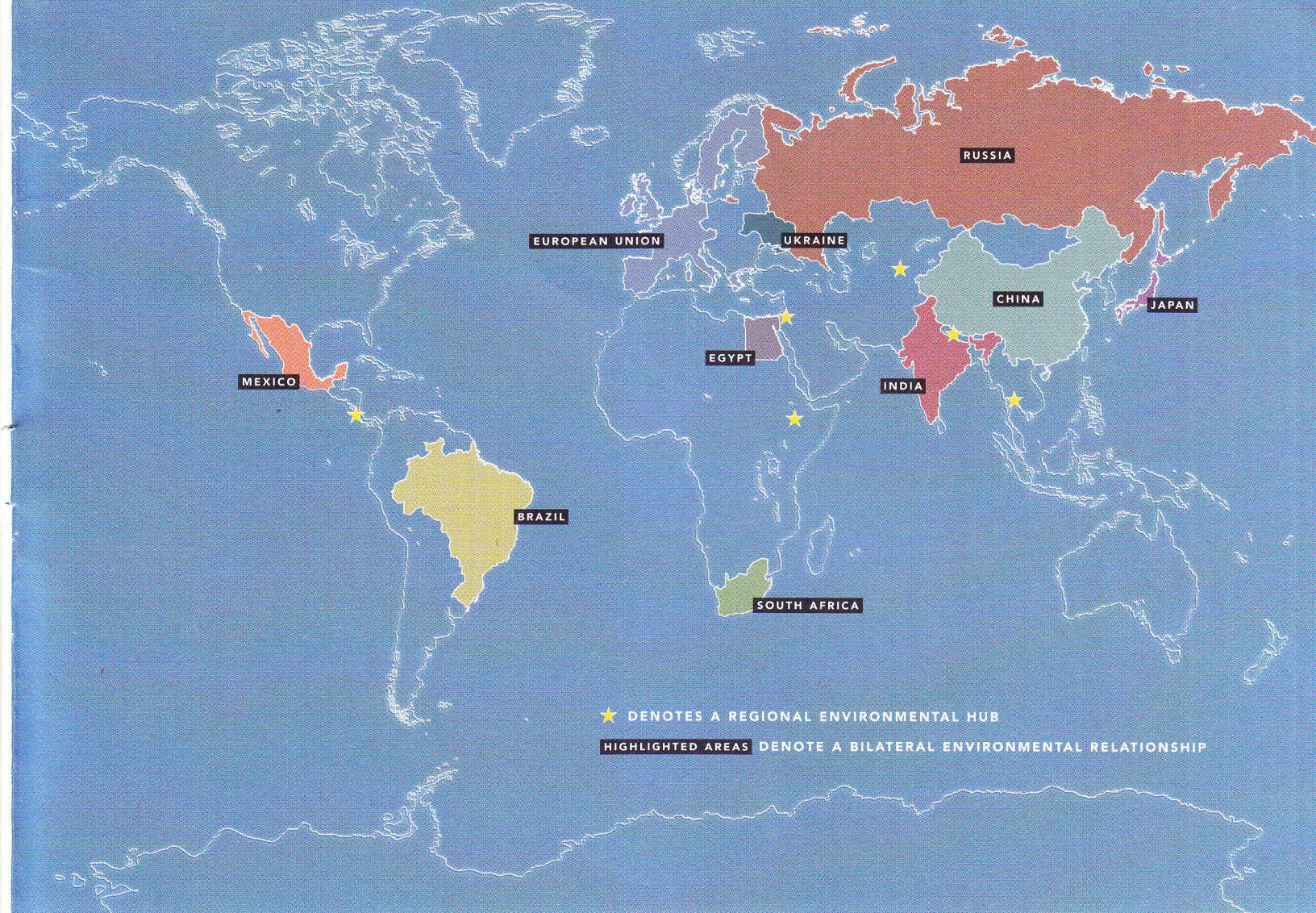


Six new “regional environmental hubs” will open this year; six more are scheduled to be in operation in 1998. The regional hubs were created to address transboundary environmental problems that can be solved only if affected nations within a region cooperate with one another. While the hubs all share a common approach of helping neighboring nations work together, each hub will tackle the priority environmental problems specific to its region:

The hub for Central America and the Caribbean, located in San Jose, Costa Rica, will focus on the loss of forests and biological diversity and on the management of coral reefs and coastlines.

In Tashkent, Uzbekistan, the Central Asian hub will work to encourage cooperation on water-related problems in the Aral Sea Basin.

Desertification, deforestation, biodiversity loss, and water use will be the focus of the Eastern Africa hub in Addis Ababa, Ethiopia.



The South Asia hub, located in Kathmandu, Nepal, will promote regional cooperation on alternative energy, clean air, water sharing, and environmental disaster preparedness.

In Amman, Jordan, the Middle East hub will work on water resources, desertification, and coral reefs in the Gulf of Aqaba as part of the Middle East peace process.

And in Bangkok, Thailand, the Southeast Asian hub will create initiatives to promote the sustainable management of forest and marine resources.

The State Department is also using or expanding its bilateral relationships with

Brazil, India, Japan, China, Russia, Ukraine, the European Union, Mexico, South Africa, and Egypt to focus on environmental issues. These bilateral frameworks allow us to coordinate our efforts and to develop joint initiatives with allies on global, regional, and bilateral problems.

MESSAGE FROM *Eileen B. Claussen*

ASSISTANT SECRETARY OF STATE FOR OCEANS AND INTERNATIONAL ENVIRONMENTAL AND SCIENTIFIC AFFAIRS

Environmental diplomacy is not an entirely new concept.

In October of 1973, Congress passed legislation creating within the State Department the Bureau of Oceans and International Environmental and Scientific Affairs (OES). The result of Congress's foresight is a bureau that for almost 25 years has been promoting the protection of the world's environment.

By negotiating key treaties and agreements and ensuring their effective implementation, OES has been instrumental in such diverse areas as conserving the unique resources of the Arctic and Antarctic, fighting to uphold the international moratorium on commercial whaling, and providing a forum for our scientists to collaborate with colleagues overseas in areas including health, agriculture, and basic sciences. Through these and other achievements, OES has made an important contribution to improving the quality of life for Americans and people around the world.

Much of this work has occurred outside the spotlight of better-known United States foreign policy objectives. But today that is changing. International environmental issues are moving from the periphery to the mainstream, as their importance is better understood and the urgency of addressing them increases.



The ability of individual nations and regions to provide clean air, water, and energy for their citizens is critical to maintaining stability and growth. The decisions the world makes about reducing greenhouse gases, conserving forests, and limiting the emissions of toxic chemicals are literally shaping the planet for this and future generations.

We have produced this report outlining our priorities and actions to build greater understanding of, and broader participation in, our efforts to tackle the growing number of increasingly complex international environmental challenges. We are committed to working with you, hearing from you, and moving forward together.



Contributing photographers:

USAID; American Petroleum Institute/WRI; Barbara Beyer; Carl C. Hansen, Smithsonian Institution; David Turnley/ Black Star Publishing; ENRIC; Jessie Cohen, National Zoological Park, Smithsonian Institution; NASA; NOAA; Ron Carmichael, Splash Dive Center, Inc.; S.C. Delaney/U.S. EPA; State Department; White House; WRI.

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